Episodic SOAP Note

Date of Exam – 8/27/2013

Time – 0930

Identifying Information:
Patient's Initials - J.G.
DOB (Age) – 9/30/43 (70y)
Gender/Race – M/Hispanic

Subjective Information

Demographics: J.G is a 70 y/o Hispanic male who lives with his wife in a house in San Antonio. He presents to clinic ambulatory, accompanied by his wife and son. Pt, wife, and son appear to be reliable historians.

Chief Complaint: J.G. states he is "having a lot of shortness of breath and swelling." His wife and son report J.G. is "having some confusion and is very tired all the time."

History of Present Illness/Analysis of Symptom: J.G.'s symptoms started about a week ago and have become increasingly worse. He is having increased shortness of breath that is worse when he is laying down and when he walks. He feels as though he "can't catch his breath," but gets some relief when he sits up. He also reports worsening/increased swelling to his lower extremities and abdomen, and new onset swelling in his scrotum. The swelling is always present in his legs, but worse at the end of the day. He reports painful scrotal swelling that is uncomfortable when he sits down. J.G.'s wife and son report that he has had mild confusion over the last week and he is tired all the time, which is concerning to them. (Daughter-in-law called with concern regarding pt's confusion, which prompted this appointment.)

Current Health Status:

Allergies: Lisinopril - cough

Medications:

Aldactone 25 mg PO twice daily
Lasix 40 mg PO every morning
Multivitamin PO daily
Lovastatin 80 mg PO every evening
Losartan 100 mg PO daily
ASA 81 mg PO daily
Omeprazole 20 mg PO twice daily
Avodart 0.5 mg PO at bedtime
Toprol XL 100 mg PO daily

Immunization Status:

PCV – 2008
Td – 2004
Flu – 2012
Hep A and Hep B vaccines started - 2013

Preventive Health:

Colonoscopy – 2007 (no polyps)

Habits (alcohol, drugs, tobacco, caffeine):

Tobacco: Quit smoking in 1988

Alcohol: Long term use (30+ years); quit July 2013

Drugs: None

Health Maintenance Practices:

Last Physical Exam: June 2013

Last PAP/Mammogram: N/A

Self Exams (breast or testicular): Does not perform

Nutrition/Diet: Currently on low protein, low sodium diet and fluid restriction. Reports having difficulty following low sodium diet.

Exercise: Reports was starting to walk for exercise a few months ago, but is unable to do so with his current symptoms.

Relevant Past Medical History:

General Health: Pt reports his health as being "okay until a couple of months ago."

Surgeries: Tonsillectomy/Adenoidectomy as child; Appendectomy @ age 15

Blood transfusions: None

Hospitalizations: None

Serious Accidents/Injuries/Fractures: None

Major Illnesses:

Childhood illnesses: None

Adult illnesses: CKD II, HTN, Hyperlipidemia, GERD, Ascites, Cirrhosis, Portal HTN

Limitation of ADL: ADLs 6/6; however patient reports he is having increased difficulty due to decreased activity tolerance and increased fatigue

Social History:

Home living conditions: Pt lives at home with his wife. His daughter-in-law is actively involved in his healthcare.

Occupation: Pt reports he had to quit his job when he was diagnosed with cirrhosis a couple of months ago.

Economic Resources/Concerns: Pt has Medicare coverage. Does not express financial concerns.

Military record: None

Religious or cultural considerations: Denies religious or cultural beliefs or practices that need to be incorporated into his care.

Family History:

Diabetes: Mother (deceased)

Heart Disease: Mother and Father (deceased)

Hypertension: Father

Denies family history of GI cancer or liver disease.

Impact on lifestyle/Pt explanatory model: Pt feels his symptoms are a result of his cirrhosis, which he feels is getting worse. He reports that the doctor has been telling him for a long time to quit drinking but he didn't think he needed to. Also reports he has gotten really sick in a short period of time which has caused him to have to quit his job, and he is scared.

Review of Systems:

General: Denies fever or chills. + weight gain of 41 lbs since 6/26.

Skin: Denies rashes, sores, itching, dryness. Positive for easy bruising.

Eyes: Denies eye pain, blurry vision, redness, or excessive tearing.

CV: Denies heart murmurs, palpitations, or chest pain. Positive for edema and orthopnea.

Chest/lungs: Denies cough, wheezing, history of asthma or COPD. Positive for dyspnea exertion.

GI: Denies dysphagia, heartburn, nausea, vomiting, constipation, diarrhea, blood in stool, or hematemesis. Positive for increased abdominal girth and fullness.

GU: Denies dysuria, urgency, frequency, or polyuria. Positive scrotal edema and dark colored urine.

Neuro/Psych: Denies depression, changes in mood, changes in speech, headache, dizziness, weakness, or neuropathy. Positive for mild confusion and somnolence.

Lymph/ Hematologic: Denies any swollen lymph nodes, anemia, or easy bleeding. Positive for easy bruising.

Objective Information

VS: T 97.2 oral, HR 63, RR 16, BP 102/64

Height 74 in, Weight 322.5 pounds, BMI 41

General: Pt oriented, but somewhat somnolent. In no acute distress. Responds to verbal commands.

Skin: Shiny, taught skin on lower extremities. Spider angiomata noted on abdomen. No caput medusa noted on abdomen.

Eyes: Scleral icterus.

CV: Regular rate and rhythm. S1 and S2 easily auscultated. No S3 or S4; no murmurs noted. No JVD. 3-4+ pitting edema on lower extremites up to distal thigh.

Chest/lungs: Diminished bases bilaterally; crackles/rales heard mid-lung region bilaterally. No retractions or use of accessory muscles.

GI: Obese; nonpalpable organs; edema/increased abdominal girth noted; shifting dullness on percussion; ascites. Normoactive bowel sounds in all 4 quadrants. Recently diagnosed cirrhosis.

GU: Scrotal edema

Neuro/Psych: Oriented to person, place, and time. Responds to verbal commands, but is somnolent. + asterixis.

Lymph/ Hematologic: No lymphadenopathy. Few scattered bruises noted on upper extremities.

Diagnostics/Lab data reviewed or noted:

Hgb/Hct – 10.2/29.4
Platelets – 81

BUN – 19
Cr – 1.43
eGFR – 50
Ammonia – 236
LDH – 227
ALT – 30
AST – 45
Bili – 4.1

BNP – 549

PT – 20.9
INR – 1.8

Assessment

Medical Diagnosis (or diagnoses)

1. Hepatic Encephalopathy (ICD9 – 572.2)
2. Cirrhosis (ICD9 – 571.2)
3. Dyspnea/Shortness of breath (ICD9 – 786.05)
4. Ascites (ICD9 – 789.5)
5. Secondary thrombocytopenia (ICD9 – 287.4)
6. CKD II (ICD9 – 585.2)

Differential Diagnoses:

(**Pt has already been diagnosed with cirrhosis and associated symptoms/complications. The following differentials could be potential causes of shortness of breath and confusion.)

1. Congestive Heart Failure

   a. **Rationale**: BNP is indicative of mild heart failure since it is greater than 300 pg/ml (Cleveland Clinic, 2011). Classic symptoms of CHF, which the patient exhibits, are dyspnea, orthopnea, peripheral edema, poor exercise tolerance, and fatigue. Additionally, one of the most common atypical presentations of CHF is delirium (Luchi & Taffet, 2007).

2. Urinary tract infection
   a. **Rationale**: Pt presented with mild confusion and dark urine, which can both be symptoms of a urinary tract infection (Mouton, Merkelz, & Espino, 2007).

Plan

Diagnostic

1. CXR in clinic – preliminary reading of x-ray showed small right pleural effusion, plural congestion, and slightly enlarged heart. Will wait for radiology report.
   a. **Rationale:** Pt was having increased dyspnea and orthopnea and his assessment revealed diminished lung sounds and crackles/rales. Further evaluation needed.
2. EGD – referral to GI for endoscopy as soon as possible.
   a. **Rationale:** Portal hypertension associated with cirrhosis can cause esophageal varices which can hemorrhage and be life threatening (Thomas, 2011).

Therapeutic

Pharmacologic

1. Start: Lactulose 10g/15ml: take 30ml by mouth three times daily.
    a. **Rationale:** Lowers stool pH which binds the ammonia in the colon, making it nonabsorbable, lowering ammonia levels (Thomas, 2011).
2. Increase Lasix to 40mg by mouth in the morning and 40mg by mouth at noon.
    a. **Rationale:** Pt is having increased edema and needs further diuresis.
3. Increase Aldactone to 50mg by mouth twice daily.
    a. **Rationale:** Pt is having increased edema and needs further diuresis.

Nonpharmacologic

1. Continue diet/fluid restrictions.

Education

1. Elevate legs when seated to help with edema.
2. Sleep with head of bed elevated (use pillows).
3. Elevate scrotum when seated using rolled towels to assist with fluid drainage.
4. Pt needs to weigh self daily and keep log. Bring to next appointment.
5. Reminded to avoid Tylenol.

Follow Up

1. RTC in 2 weeks with PA
2. RTC in 4 weeks with MD
3. RTC sooner if s/s worsen.

References

Cleveland Clinic. (2011). *B-type Natriuretic Peptide (BNP) Blood Test*. Retrieved from http://my.clevelandclinic.org/heart/diagnostics-testing/laboratory-tests/b-type-natriuretic-peptide-bnp-bloodtest.aspx

Luchi, R.J. & Taffet, G.E. (2007). Congestive heart failure. In R.J. Ham, P.D. Sloane, G.A. Warshaw, M.A. Bernard, & E. Flaherty (Eds.), *Primary care geriatrics: A case-based approach* (pp. 461-468). Philadelphia, PA: Mosby.

Mouton, C.P., Merkelz, K.P., & Espino, D.V. (2007). Urinary tract infections. In R.J. Ham, P.D. Sloane, G.A. Warshaw, M.A. Bernard, & E. Flaherty (Eds.), *Primary care geriatrics: A case-based approach* (pp. 560-565). Philadelphia, PA: Mosby.

Thomas, D.J. (2011). Abdominal problems. In L.M. Dunphy, J.E. Winland-Brown, B.O. Porter, & D.J. Thomas (Eds.), *Primary care:The art and science of advanced practice nursing* (pp. 492-581). Philadelphia, PA: F.A. Davis Company.

Journal Article Critique

Although not directly stated, Sharma, Sharma, Agrawal, and Sarin (2009) addressed and answered the following PICO question in their study: "Does lactulose prevent recurrence of hepatic encephalopathy in cirrhotic patients compared to placebo?" This was a quantitative study which used a randomized controlled trial to test the efficacy of an intervention. The subjects were randomized by computer-generated random numbers to either receive lactulose or no lactulose. There was very specific exclusion criteria which eliminated almost half (46.6%) of the 300 patients that were screened, which, I feel, left a somewhat small sample size of 140 participants. The clinical and demographic characteristics of the treatment and control groups were similar. An additional 15 patients, either lost to follow-up or excluded after randomization, were excluded from the data analysis making the sample size even smaller. The study was not blinded, which was a limitation; however, the randomization sequence remained concealed from the investigators until the intervention was assigned to each group. Because of the nature of the intervention, in that it causes changes in bowel habits, the investigators reported that it would have been difficult to have a blinded study. All patients were assessed by psychometry and there was a high prevalence of abnormal results in both groups. The patients also had their blood ammonia levels checked at the beginning of the study. Patient follow-ups occurred every month and the end point of the study was either the development of overt hepatic encephalopathy or completion of a minimum follow-up of 6 months.

Twelve of 61 (19.6%) patients in the lactulose group and 30 of 64 (46.8%) patients in the no lactulose group developed recurrent hepatic encephalopathy, which shows that lactulose is an effective intervention. Upon analyzing the data, it was noted that there were significantly more patients in the lactulose group with infections as a precipitating factor and this may have

contributed to the outcome between the two groups. The psychometry testing and ammonia levels were not repeated at the end of the study. Although the study showed that lactulose is effective for preventing recurrence of hepatic encephalopathy, in my opinion, it would have been valuable to compare ammonia levels before and after the intervention. Another limitation of the article was that it did not disclose whether or not there were any biases in the study. In summary, I feel that the article provided sufficient evidence to answer the PICO question for the purpose of the study and the results of the study can easily be applied to similar patients within this population.

Sharma, B.C., Sharma, P., Agrawal, A., & Sarin, S.K. (2009). Secondary prophylaxis of hepatic encephalopathy: An open-label randomized controlled trial of lactulose versus placebo. *Gastroenterology, 137*(3), 885-891. doi:10.1053/j.gastro.2009.05.056